

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III

## 841 Chestnut Building Philadelphia, Pennsylvania 19107

JUN 1 5 1989

Commander, Atlantic Division
Naval Facilities Engineering Command
Norfolk, VA 23511-6287
Attn: Mr. Ken Walker (Code 1152)
Remedial Project Manager

Re: Norfolk Naval Base (Contract # N62470-83-C-6079)

Dear Mr. Walker:

Enclosed are EPA's comments regarding the Remedial Investigation (RI) - Interim Report and Confirmation Study (CS) prepared for the Norfolk Naval Base (NNB).

## General Comments

## <u>Hazard Ranking System</u>

The Navy should be cognizant of proposed revisions to the HRS, which were published in the December 23, 1988 Federal Register. Currently, the proposed revisions are undergoing review/comment. Although a date has not been firmly established, EPA anticipates that this proposed HRS will be finalized sometime during the January-May 1990 timeframe. Evaluation of facilities for inclusion on the National Priorities List (NPL) has been suspended, pending finalization of the proposed HRS.

As stipulated in Section 105(c)(4) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA), nothing precludes EPA from considering new information when implementing the provisions of this Act. In the event that significant new information is obtained at a facility which was evaluated prior to the effective date of the amendments to the HRS, that facility would be re-evaluated under the amended HRS. A copy of the proposed revisions to the HRS (attachment one) has been enclosed for the information of Atlantic Division, Naval Facilities Engineering Command (LANTDIV).

Finally, it is important to note that, at a minimum, all informational requirements of the HRS (which are codified in 40 CFR Part 300, Appendix A) must be satisfied in order to ensure that NNB may be evaluated for inclusion on the NPL. In the event that insufficient information exists to score NNB, the facility will be notified by EPA.

# Sites Not Recommended for Confirmation Study

#### Table 2-2

Unless already supplied to EPA, the Navy should provide information, as specified, regarding several sites identified during the Initial Assessment Study (IAS). The following items should be addressed:

- 1) EPA requests additional information with respect to the cleanup of contamination at sites #11, #14, #15 and #17. The Navy should also indicate whether cleanup was performed in conjunction with either EPA or the State of Virginia.
- 2) Navy should indicate the extent of the investigation at the alleged mercury disposal area (site #12). The sampling plan and analytical results should be submitted to EPA.
- 3) EPA requests a copy of the landfill permit for site #18, as issued by the Virginia State Department of Health.

#### NEPA Functional Equivalency

LANTDIV is reminded that all remedial actions at NNB shall be conducted in a manner that ensures functional equivalency with the National Environmental Policy Act of 1969, as amended (NEPA). A checklist (attachment two), which highlights environmental factors that should be addressed prior to implementation of any remedial action, has been enclosed for the information of LANTDIV.

#### Future Considerations

#### Page 2-5 (paragraph one)

Additional information is requested concerning the monitoring wells installed at Camp Allen Landfill prior to initiating the the RI. The contractor should indicate whether these wells actually represent the eleven (11) monitoring wells installed during the Site Suitability Assessment (SSA).

In the event that these wells differ from the SSA wells, the following information is requested: (1) well location; (2) date(s) of installation; (3) purpose of installation; (4) well construction details; (5) date(s) of sample collection; (6) parameters for which ground water samples were analyzed and (7) analytical results.

EPA recognizes that galvanized steel is not a recommended well construction material for use in ground water sampling and analysis programs. Nevertheless, to obtain additional information as to the extent of ground water contamination at Camp Allen Landfill, it would be acceptable to analyze ground water samples from such wells for organic constituents.

#### Page 2-5 (paragraph two)

Although none of the three wells supply drinking water, it appears as though the two water wells located at the Sheller-Globe plant are being utilized to supply ground water for use in industrial processes. No specific usage is attributed to the existing water supply well located near building MCA-600.

With respect to these wells, the Navy should indicate whether ground water is being used for industrial and/or agricultural purposes. In addition to well depths, the Navy should provide well construction information such as drilling method, geologic formation(s) penetrated, depth of casing, location of screened interval and date of installation.

## Pages 3-1 and 3-2 (section 3.2)

Whenever obtaining samples during soil boring, EPA stresses that the contractor always include provisions for the following:

- 1) Submission of a select number of subsurface soil samples to geotechnical analyses (e.g., grain size distribution, moisture content, upper and lower plastic limits, etc.) in order to confirm field classifications of sediments logged during drilling and further characterize subsurface soil conditions.
- 2) Collection of subsurface soil samples for laboratory analyses, in the event that changes in physical/chemical characteristics of the penetrated materials are measured (using a portable organic vapor analyzer) or observed in the field.

# Pages 3-2 and 3-3 (section 3.3)

The contractor should have provided the following information regarding ground water monitoring well installation:

- 1) Rationale for selecting a 0.01-inch slotted well screen and filter pack material consisting of 0.01 to 0.03 inch diameter sand (e.g., grain size distribution analysis, etc.).
- 2) Monitoring well development data such as dates of development, pumping rate, quantity of water removed and the criteria used to determine when a well was sufficiently developed (e.g., stabilization of temperature, specific conductivity, pH, etc.).
- 3) Well boring logs that include information such as ground surface elevation (as referenced to the National Geodetic Vertical Datum) and a description of subsurface soil (in accordance with the United Soil Classification System).
- 4) Manner in which drilling fluids, drilling cuttings, well development water and purged well water were managed.
- 5) Method of placement of bentonite pellets.
- 6) Detailed cross-sectional diagram of each monitoring well (note that it is not acceptable to simply provide a generalized diagram such as Figure 3-1 to illustrate construction of a monitoring well) which contains the following information:
  - top and bottom elevations of the protective steel casing, PVC well casing, PVC well screen, sand filter pack and bentonite sealant.
  - total depth of borehole.
  - diameter of borehole and well casing.

EPA also recommends that the filter pack and annular sealants be installed in the following manner:

- 1) Filter pack extending no more than two (2) feet above the top of the well screen.
- 2) A minimum two (2) feet thickness of bentonite, immediately overlying the filter pack, as an annular sealant in the saturated zone.

- 3) A cement-bentonite mixture as the annular sealant in the unsaturated zone above the bentonite sealant and below the frost line.
- 4) Expanding cement to fill the remainder of the borehole annulus in order to avoid potential damage to the monitoring well as a result of frost heave.

Finally, provisions should be included for the detection and collection of both light and dense phase immiscibles.

# Page 3-3 (section 3.4)

Specific information must be supplied with respect to the location and elevation survey. The vertical and horizontal controls utilized by the contractor should be specified in the RI. EPA recommends that, for each monitoring well, elevation of the ground surface and top of PVC casing be measured to an accuracy of  $\pm$  0.01 feet. In addition, state plane coordinates should be used to determine well locations to an accuracy of  $\pm$  0.5 feet.

## Page 3-3 (section 3.5)

The RI report should include a sampling and analysis plan which specifies the following information:

- 1) Field and laboratory quality assurance/quality control protocol.
- 2) Field sampling activities (e.g., sample collection, preservation and storage techniques).
- 3) Chain-of-custody procedures.

# Specific Comments

#### Camp Allen Landfill (site #1)

#### Page 4-1 (section 4.1)

EPA requests a copy of the document entitled "Site Suitability Assessment, Proposed Brig Expansion (P-977), Naval Station, Norfolk, Virginia".

### Page 4-2 (paragraph one)

With respect to the one-time sampling event of the eleven ground water monitoring wells installed during the SSA, the Navy should specify the date(s) of sample collection and parameters for which samples were analyzed. Results of laboratory analyses should be summarized in the RI as well.

## Page 4-6 (section 4.5)

The Navy should include the list of parameters for which the "bright red, viscous liquid" was analyzed. Results indicate that 1.6% to 1.7% (corresponding to a concentration of 16,000 to 17,000 parts per million) volatile organics were detected. A list of specific volatile organics is desired.

#### Section 4.6 (Tables 4-10 through 4-14)

Much of the information in the section entitled "Water Quality Standards/Criteria" is inaccurate. For several compounds, the contractor has failed to include information regarding standards/criteria when, in fact, such information does exist. Furthermore, information provided by the contractor has, in many instances, been updated by the more recent EPA publication entitled "Quality Criteria for Water, 1986." A copy of this document is available upon request.

Although corrected standards/criteria for specific compounds (attachment three) have been provided, such will not be the case in the future. This information is readily accessible and should have been incorporated within the RI report by the LANTDIV contractor. The following comments concerning the Table 4-10 through 4-14 are offered:

- 1) For Tables 4-10 and 4-12, the heading "Human Health Ingestion" should read "Human Health Criteria". The sub-headings "water" and "aquatic" should be changed to "water and fish consumption" and "fish consumption only", respectively.
- 2) With respect to Table 4-10, the contractor should indicate the source utilized when assigning a "chronic toxicity marine aquatic life" standard of 3500 ug/l for phenol. The sources of "human health criteria water and fish consumption" for total copper (0.001 mg/l) and total zinc (5.0 mg/l), provided on Table 4-12, should be cited as well.

- 3) If it is the contractor's intent to provide values for human health criteria that are representative of a 1.0E-05 excess lifetime cancer risk, then values provided on Table 4-10 should correspond to the specified risk levels as appropriate. Furthermore, the contractor should indicate when referenced human health criteria are not risk-based (e.g., in the cases of non-carcinogenic compounds).
- 4) The title of Table 4-11 should be changed since each value provided does not represent an MCLG. Also, the contractor should distinguish between proposed and final MCLs and MCLGs
- 5) On Table 4-11, the parameter "ethylene" should read "ethylbenzene" and the prefix "1,1,2,2-" may be omitted since there exists only one tetrachloroethylene isomer.
- 6) Somewhere on Table 4-11 (or in the narrative of the RI report), information should be included that describes the manner in which values listed under sub-heading "reference dosage" and "risk specific dose" were calculated. It should be noted that any values listed under these sub-headings would actually represent concentrations that correspond to given reference dosages and risk specific doses.
- 7) It is possible to calculate values for many of the parameters listed in Table 4-11 by using reference dosages and cancer potency factors that are available from existing literature. The contractor should have included such values whenever possible, since, given a few basic assumptions (e.g., assigned carcinogenic risk level, 70 kg body weight and ingestion of two liters of water per day), they may be calculated with ease.
- 8) With respect to inorganics listed on Table 4-12, values for "Toxicity to Aquatic Life" should be revised to match those listed on Table 4-13, while also incorporating EPA comments in attachment three.
- 9) The values provided on Table 4-13 for "arsenic, total" and "chromium, total" in Table 4-13 actually represent those corresponding to trivalent arsenic and hexavalent chromium.
- 10) Table 4-14 should include information stating that values for copper and zinc represent secondary MCLs.

## Page 4-8 (bottom of page)

Since the site-specific analytical results pertain to ground water samples, the presence of aquatic life seems unlikely. The statement "...particulates...do not necessarily represent what is readily assimilated by any particular aquatic species" is therefore confusing and should be clarified. It should be noted that, with respect to surface water, contaminants (such as metals) adsorbed onto particulate matter may be readily assimilated by, and therefore adversely impact, certain aquatic species, most notably the filter feeders.

## Page 4-10 (second paragraph)

Additional information is requested concerning the Navy's investigation of a former waste oil and solvent dumping site.

#### Section 4.8

With respect to the "Conclusions and Recommendation" section for site #1, EPA offers the following comments:

- 1) In general, EPA does not have any objections to the sample locations, as proposed on Figure 4-3, provided that the agency's specific concerns are addressed.
- 2) Sediment samples should also be collected in order to determine whether contaminants are migrating along the drainage ditches. Samples should be collected at the same locations as were SW-08, SW-09, SW-10 and SW-11 and analyzed for parameters listed in Table 4-1.
- 3-) The contractor should provide well construction details regarding the 11 SSA wells.
- 4) In addition to monitoring well B-20W, the remaining 10 SSA wells should be included in the sampling plan, if necessary.
- 5) The presence buried features at site #1, a possibility alluded to by the contractor on page 4-9 of the RI report, cannot be dismissed. EPA suggests that Navy consider employing surface geophysical techniques such as a magnetometry, electromagnetics or ground penetrating radar to locate buried containers (cans, drums, etc.) and delineate trench boundaries, both of which may be indicative of past waste disposal.

6) Consideration should be given to performing a soil-gas survey in order to locate additional sources of volatile organic constituent (VOC) contamination and/or to more accurately delineate the extent of VOC contaminatation from sources near wells 01GW-04 and B-20W.

## NM Area Slag Pile (site #2)

## Page 5-1 (paragraph two)

Rationale for limiting sample analyses to the metals beryllium, cadmium, chromium, copper, nickel and zinc should be explained. If these metals were associated with past aluminum smelting operations, then the contractor should indicate so in the RI report.

#### Table 5-2

The contractor should explain why soil sample S-01 was not analyzed for lead since SED-01 seems to indicate a source of lead within the slag pile.

#### Section 5.6

EPA offers the following comments regarding the "Conclusions and Recommendations" section for site #2:

- 1) The contractor should explain the meaning of the term "water column" as it is used in this section.
- 2) Assuming that the term "water column" refers to ground water, the statement "Leaching of metals into the water column does not appear to be a problem" is probably correct. However, there exists no site-specific ground water quality data with which to validate this statement.
- 3) A sediment sample should be collected at an area northeast of the SED-03 and SED-02, past the point where the two drainage ditches converge.
- 4) The lateral and vertical extent of soil contamination at site #2 should be characterized prior to initiating remedial action.

# O Area Drum Storage Yard (site #3)

#### Figure 6-1

The contractor should offer an explanation as to why no samples were collected from the southern portion of site #3.

## Page 6-2 (paragraph 2)

The contractor should explain why only cadmium and chromium were analyzed for EP toxicity during third round sampling. Using relative concentrations of each contaminant in soil (Table 6-7) as a selection criterion, it would seem as though lead should have been analyzed for EP toxicity as well.

#### Page 6-2 (paragraph 4)

The Navy should indicate the depth at which samples designated "A" through "H" were collected. Also, clarification should be provided with respect to the term "residual volatile organics".

## Section 6.6 (Tables 6-10 through 6-14)

This section should be modified in accordance with previous EPA comments (refer to comments on section 4.6 and attachment two).

## Page 6-6 (paragraph two)

In light of the statement "...the extent to which volatile constituents...may have migrated downgradient is not known", EPA recommends installation of monitoring wells downgradient of the "leaking drum area".

# Page 6-7 (paragraph one)

Since samples were not filtered prior to laboratory analysis, the statement "...values reported for the inorganics are not considered significant" is probably accurate. Nevertheless, EPA suggests that filtered samples be analyzed in order to validate this statement.

#### Page 6-7 (paragraph three)

Contrary to the statement by the contractor, significant concentrations of a special analyte, oil and grease (see Table 6-5), were observed.

#### Section 6.9

EPA offers the following comments regarding the "Conclusion and Recommendations" section for site #3:

1) The five organics "...identified by EPA as having carcinogenic effects..." should be more precisely characterized as to their carcinogenic class.

- 2) In the event that well pairs are installed, placement of each well in closely spaced, separate boreholes is recommended.
- 3) A reference to "...some hazardous substances..." being stored at site #3 is unclear. The contractor should specify the hazardous substances designated for storage.
- 4) The statement on page 6-10, "...soils were not classified as hazardous waste" must be supported by analytical data. This statement appears to be based solely upon oil/grease and "residual volatile organics" measurements. In order to make an informed determination as to whether the soil is hazardous waste, it must be tested for ignitability, reactivity and EP toxicity for all metals specified in 40 CFR Part 261, subpart C. It would also be prudent to identify the individual constituents of the observed oil and grease.
- 5) EPA agrees that it will be necessary to establish proper spill control measures in the aftermath of soil excavation. The agency also concurs with the conceptual design of an enclosed area to store damaged and/or leaking drums and further suggests that such an area be equipped with a spill control structure such as a dike/berm or sump.
- 6) The contractor should consider performing a soil-gas survey in order to identify additional sources areas of VOC contamination throughout site #3.
- 7) EPA stresses that the appropriate remedial alternative be selected only after completion of additional site characterization efforts.

## Transformer Storage Area (site #4)

The following comments are offered concerning the proposed remediation of PCB-contaminated soil:

1) In addition to Aroclor 1260, transformer oils may also contain Aroclor 1242 and 1254. Therefore, EPA suggests that, at a minimum, the sampling plan be expanded to include these aroclors. Consideration should also be given to collecting and analyzing soil/sediment samples for 2,3,7,8-TCDD and chlorinated dibenzofurans.

- 2) Any soil detected with a contaminant concentration greater than the target cleanup level should be removed and remediated. Since direct contamination of surface water or public/private drinking water supply sources has not occurred. the more stringent regionspecific target cleanup level of 2 ppm is not appropriate to the circumstances of this release; rather, a 10 ppm Due to the uncertainty of cleanup level is recommended. future water usage, it is EPA's opinion that a less stringent cleanup, such as 25 ppm, is not appropriate. Given a target cleanup level of 10 ppm, boring locations 2, 3, 6, 13, 14, 19, 20, 24 and 37 should be included in the initial removal plans.
- 3) On page 7-3, the contractor states that "The estimated quantity of material to be removed, 500 cubic yards, includes an over excavation of one foot to insure removal of all contaminated soils." It should be noted that, regardless of the proposed over excavation, post-cleanup samples must be collected in order to verify that the cleanup level has been attained. Any remaining contamination must be removed and additional samples collected, until the area is demonstrated clean.
- 4) It is suggested that the Navy consider alternatives to off-site disposal and incineration such as Potassium Polyethylene Glycolate Dechlorination (KPEG) and Low Temperature Thermal Stripping (LTTS). We strongly recommend that the Navy call or write the following EPA personnel to discuss these treatment technologies:

KPEG: Charles J. Rogers

U.S. Environmental Protection Agency Risk Reduction Engineering Laboratory

Cincinnati, OH 45268

Telephone: (513) 569-7757

LTTS: Robert Thurnau or Paul dePercin

U.S. Environmental Protection Agency Risk Reduction Engineering Laboratory

Cincinnati, OH 45268

Telephone: (513) 569-7692 or (513) 569-7797

These individuals will be able to provide the Navy with information regarding the feasibility of implementing the respective technologies, given the site-specific conditions at site #4.

- 5) At the present time, it is not known whether the permit exemption specified under SARA Section 121(e) is applicable to actions conducted under the Department of Defense (DOD) Installation Restoration Program at facilities not listed on the NPL. In other words, it may be necessary to comply with administrative requirements associated with the permitting of on-site remedial actions. The Navy should be aware of the potential for delays involving implementation of either KPEG or LTTS technologies. As a result, it is possible that a time-consuming permitting process will prevent expeditious remediation of hazardous substances.
- 6) However, the Navy should not eliminate remedial alternatives such as KPEG or LTTS from further consideration simply due to actual or perceived difficulties in complying with permit requirements.
- 7) Currently, personnel at EPA Headquarters are addressing the issue of permit requirements for non-NPL federal facilities. For additional information concerning this matter, the Navy should call Ms. Linda Southerland at (202) 475-9806. It is suggested that the Navy also solicit input regarding permit requirements from the State of Virginia.

## Pesticide Disposal - Building V-95 (site #5)

#### Figure 8-1

The contractor should explain why surface samples were not collected from the area between station 05S-06 and the storm drain.

# Section 8.5 (Tables 8-8 through 8-10)

This section should also be modified in accordance with previous EPA comments (refer to comments on section 4.6 and attachment two).

#### Table 8-7

Depths of sample collection should be specified for locations 05S-11 through 05S-18.

## Section 8.8

EPA offers the following recommendations with respect to site #5:

- 1) With respect to first round sampling stations 05S-01 and 05S-02, soil samples from a depth of less than four (4) feet were not collected. Surface samples from 0-2 foot and 0-4 foot intervals should be collected and analyzed for priority pollutants and the five-peak library search base/neutral fraction constituents.
- 2) Although soil samples were collected at the 0-2 foot depth interval during the second round, analyses were only conducted for base/neutral extractables, pesticides/PCBs and the five-peak library It is conceivable that acid-extractable constituents. organics and priority pollutant metals, although present at these depths, were simply not detected. Therefore, EPA suggests that, at stations 05S-03 through 05S-10, surface samples be collected and analyzed for acid extractables and priority pollutant metals.
- 3) Samples collected during the third round, at stations 05S-11 through 05S-20, were only analyzed for base-neutral extractables. It is suggested that samples be collected and analyzed for the remaining priority pollutants and the base/neutral library constituents.
- 4) A round of filtered samples should be collected from the monitoring well at site #5 and analyzed for priority pollutant metals.
- 5) The RI report fails to address the storm drain inlet (Figure 8-1), which represents a potential pathway for contaminant transport. The contractor should provide information as to the destination of any surface water entering the storm drain.
- 6) EPA suggests that additional soil samples be collected at the area between station 05S-06 and the storm drain. Samples should be collected at the depth intervals specified for station 05S-06 and analyzed for priority pollutants and five-peak base/neutral library constituents.
- 7) It may be necessary to evaluate the risk posed to NNB personnel resulting from direct contact with and accidental ingestion of contaminated soil. In this case, consideration should be given to collecting surficial soil samples at stations 05S-01 through 05S-20 and conducting analyses for priority pollutants and five-peak base/neutral library constituents.

- 8) EPA concurs with the proposed evaluation of on-site activities and development/implementation of spill prevention and cleanup plans.
- 9) Selection of an appropriate remedial alternative should be deferred until the sampling requirements specified by EPA have been satisfied.

## CD Landfill (site #6)

The following questions/comments are of a general nature and concern the CS report prepared for site #6 by LANTDIV personnel:

- I) LANTDIV should indicate whether ash generated at the power plant and salvage fuel boiler plant was ever chemically analyzed. If so, then the list of sampling parameters and analytical results should be provided.
- 2) Prior to analysis for cadmium, surface water samples should be preserved to a pH of less than 2.0 using nitric acid.
- 3) The EP toxicity limit for cadmium is incorrectly cited as 10,000 ug/L. The actual value is 1000 ug/L.
- 4) LANTDIV should indicate whether any surface or sediment samples have been collected since 12/02/85.
- 5) In addition to human receptors such as recreational users of Willoughby Bay, LANTDIV should consider potential adverse impacts to aquatic life.
- 6) Distances from the drainage ditches adjacent to site #6 to the referenced underground culvert that discharges to Willoughby Bay should be provided.
- 7) Site #6 should be included on the location map (Figure 2-1 of the RI report) in order to show its relationship to the other five (5) IRP sites at NNB.

On page 12 of the CS report, LANTDIV states that "cadmium in the sediment could either be the result of erosion from the landfill surface or chemical precipitation as the shallow ground water flows into adjacent surface waters." However, there exists a paucity of site-specific data on which to support this statement.

In order to arrive at an informed decision regarding potential sources of cadmium, information as to the lateral/vertical extent of the landfill and location of the shallow ground water table must be obtained. It would then be necessary to determine if/when ground water is actually discharging to adjacent surface water bodies. If warranted, ground water and surface water samples would be collected, filtered and analyzed for soluble cadmium. A comparison of ground and surface water analytical results would facilitate a determination as to whether chemical precipitation was contributing significantly to the observed concentrations of cadmium in the sediment.

A "very thin layer of sediment...representative of recent deposition" was collected by LANTDIV at several locations along the drainage ditch. Upon examining the analytical results, it was observed that levels of cadmium in the surficial samples varied significantly through time. EPA believes that fluctuations in cadmium levels may be attributable to the continual processes of erosion, transportation and subsequent deposition of sediments derived from both the landfill and the drainage ditch. Along the reach of the drainage ditch there are likely to exist areas of active erosion and deposition, the latter area representing a site where cadmium-contaminated sediment may As a result, in addition to temporal be accumulating. variation, cadmium contamination within the drainage ditch may also exhibit spatial variation.

It will be necessary to determine, at a minimum, the depth and areal extent of contaminated sediment prior to implementing a remedial alternative. As a result, EPA recommends that the following tasks be performed:

- 1) Additional sampling stations should be established upstream of both the "north branch" and "south branch" locations. LANTDIV should also consider collecting surface water samples at these locations.
- 2) Surface water and sediment samples should be collected at locations further downstream, past the intersection of the "north branch" and "south branch".
- 3) At selected locations, sediment samples should be collected at various depths in order to characterize the vertical extent of contaminated sediment.
- 4) Analyses should be conducted for total and dissolved cadmium (surface water) and total and EP toxic cadmium (sediment).

In closing, it is suggested that LANTDIV obtain a copy of the most recently published EPA guidance entitled "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA - Interim Final", dated October 1988". A copy of this document is available upon request.

Any questions concerning this letter should be directed to the following individual:

U.S. Environmental Protection Agency Federal Agency Compliance Section (3ES41) 841 Chestnut Building Philadelphia, PA 19107 Attn: Drew Lausch, Hydrogeologist (215) 597-3634

EPA appreciates having been afforded an opportunity to review the RI and CS reports and looks forward to a continued working relationship with LANTDIV in the future.

Sincerely,

Jeffrey M. Alper, Chief

Federal Agency Compliance Section

cc w/o enclosures:

Steven L. Gibson (COMNAVBASE)
Jon Horin (VA Department of Waste Management)